

### **SD 3.1 Cigarette Smoking Among Youth**

More than 3 million youth ages 12-17 are current smokers,<sup>35</sup> and every day, more than 6,000 children try smoking for the first time.<sup>36</sup> Youthful smoking can have severe, lifelong consequences because a large proportion of those who initiate smoking in adolescence will continue to smoke as adults.<sup>37</sup> According to the U.S. Centers for Disease Control and Prevention five million children who are alive today will ultimately die from smoking-related illnesses, unless current rates are reversed. Treating tobacco dependence is particularly important in that it can prevent a variety of costly chronic diseases, including heart disease, cancer, and chronic lung disease. It has been estimated that smoking cessation is more cost effective than other commonly provided clinical preventive services, including screening for cervical, breast, and colon cancer, treatment of mild to moderate high blood pressure, and treatment of high cholesterol.<sup>38</sup>

Daily smoking among 12th-grade students decreased sharply in the late 1970s but increased throughout most of the 1990s. In 2000, however, the percentage of 12th graders reporting daily smoking decreased to 20.6. Data for 8th- and 10th-grade students indicate a peak in daily smokers in 1996, which declines starting in 1997 and continuing to 2000 (see Table SD 3.1.A.).

Increases in the prevalence of current smoking among youth are also reflected in the results from the Youth Risk Behavior Survey, which examines “current smoking,” or smoking on one or more of the previous 30 days (see Table SD 3.1.B.)

**Differences by Age.** In general, as age and or grade increases so does the prevalence of smoking. In 2000, the percentage of students who report daily smoking was 7.4 percent among 8th graders, 14.0 percent among 10th graders, and 20.6 percent among 12th-grade students (see Figure SD 3.1).

**Differences by Race and Hispanic Origin.**<sup>39</sup> Youth tobacco use varies within and among racial and ethnic minority groups. White students consistently have the highest rates of smoking, while Black students consistently have the lowest (see Tables SD 3.1.A and SD 3.1.B.). The prevalence of current smoking among White students is about twice that of Black students. White students are twice as likely as Hispanic students and three times as likely as Black students to be frequent smokers (see Table SD 3.1.B.).

**Differences by Gender.** There is little to no difference in the prevalence of smoking between males and females, with the exception of Black youth. Among Black youth in grades 9 through 12, males were more likely than females in 1995, 1997, and 1999 to report current and frequent smoking (see Table SD 3.1.B.).

<sup>35</sup> Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services (HHS), Summary Findings.

<sup>36</sup> CDC, Incidence of Initiation of Cigarette Smoking-United States 1965-1996, *MMWR*, 47(39) (October 9, 1998).

<sup>37</sup> The Monitoring the Future Study, The University of Michigan. *Cigarette Smoking Rates May Have Peaked Among Younger Teens*. Press release of December 18, 1997.

<sup>38</sup> Allen, K., et al. 1993. Teenage Tobacco Use: Data Estimates from the Teenage Attitudes and Practices Survey, United States, 1989. *Advance Data*, 224:1-20.

<sup>39</sup> Estimates of Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

**SOCIAL DEVELOPMENT AND BEHAVIORAL HEALTH**

**Table SD 3.1.A**

**Percentage of 8th-, 10th-, and 12th-grade students who reported smoking cigarettes daily over the previous 30 days, by gender and by race and Hispanic origin: Selected years, 1975-2000**

|                                       | 1975 | 1980 | 1985 | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|
| <b>8th Grade</b>                      |      |      |      |      |      |      |      |      |      |      |
| Total                                 | —    | —    | —    | —    | 9.3  | 10.4 | 9.0  | 8.8  | 8.1  | 7.4  |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | —    | —    | —    | —    | 9.2  | 10.5 | 9.0  | 8.1  | 7.4  | 7.0  |
| Female                                | —    | —    | —    | —    | 9.2  | 10.1 | 8.7  | 9.0  | 8.4  | 7.5  |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | —    | —    | —    | 10.5 | 11.7 | 11.4 | 10.4 | 9.7  | 9.0  |
| Black                                 | —    | —    | —    | —    | 2.8  | 3.2  | 3.7  | 3.8  | 3.8  | 3.2  |
| Hispanic                              | —    | —    | —    | —    | 9.2  | 8.0  | 8.1  | 8.4  | 8.5  | 7.1  |
| <b>10th Grade</b>                     |      |      |      |      |      |      |      |      |      |      |
| Total                                 | —    | —    | —    | —    | 16.3 | 18.3 | 18.0 | 15.8 | 15.9 | 14.0 |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | —    | —    | —    | —    | 16.3 | 18.1 | 17.2 | 14.7 | 15.6 | 13.7 |
| Female                                | —    | —    | —    | —    | 16.1 | 18.6 | 18.5 | 16.8 | 15.9 | 14.1 |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | —    | —    | —    | 17.6 | 20.0 | 21.4 | 20.3 | 19.1 | 17.7 |
| Black                                 | —    | —    | —    | —    | 4.7  | 5.1  | 5.6  | 5.8  | 5.3  | 5.2  |
| Hispanic                              | —    | —    | —    | —    | 9.9  | 11.6 | 10.8 | 9.4  | 9.1  | 8.8  |
| <b>12th Grade</b>                     |      |      |      |      |      |      |      |      |      |      |
| Total                                 | 26.9 | 21.3 | 19.5 | 19.1 | 21.6 | 22.2 | 24.6 | 22.4 | 23.1 | 20.6 |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | 26.9 | 18.5 | 17.8 | 18.6 | 21.7 | 22.2 | 24.8 | 22.7 | 23.6 | 20.9 |
| Female                                | 26.4 | 23.5 | 20.6 | 19.3 | 20.8 | 21.8 | 23.6 | 21.5 | 22.2 | 19.7 |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | 23.9 | 20.4 | 21.8 | 23.9 | 25.4 | 27.8 | 28.3 | 26.9 | 25.7 |
| Black                                 | —    | 17.4 | 9.9  | 5.8  | 6.1  | 7.0  | 7.2  | 7.4  | 7.7  | 8.0  |
| Hispanic                              | —    | 12.8 | 11.8 | 10.9 | 11.6 | 12.9 | 14.0 | 13.6 | 14.0 | 15.7 |

<sup>a</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Estimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Sources: Johnston, O'Malley, and Bachman, 2000.

**Behavioral Health: Smoking, Alcohol, and Substance Abuse**

**Table SD 3.1.B**

Percentage of students in grades 9 through 12 in the United States who reported current and frequent smoking, by gender, race and Hispanic origin, and grade: Selected years, 1991-1999

|   | Current Smoking <sup>a</sup> |      |      |      |      | Frequent Smoking <sup>b</sup> |      |      |      |      |
|---|------------------------------|------|------|------|------|-------------------------------|------|------|------|------|
|   | 1991                         | 1993 | 1995 | 1997 | 1999 | 1991                          | 1993 | 1995 | 1997 | 1999 |
| <b>Total</b>                                | 28                           | 31   | 35   | 36   | 35   | 13                            | 14   | 16   | 17   | 17   |
| Male  | 28                           | 30   | 35   | 38   | 35   | 13                            | 14   | 16   | 18   | 18   |
| Female                                      | 27                           | 31   | 34   | 35   | 35   | 12                            | 14   | 16   | 16   | 16   |
| <b>Race and Hispanic origin<sup>c</sup></b> |                              |      |      |      |      |                               |      |      |      |      |
| White                                       | 31                           | 34   | 38   | 40   | 39   | 15                            | 16   | 20   | 20   | 20   |
| Male  | 30                           | 32   | 37   | 40   | 38   | 15                            | 16   | 18   | 20   | 21   |
| Female                                      | 32                           | 35   | 40   | 40   | 39   | 16                            | 16   | 21   | 20   | 19   |
| Black                                       | 13                           | 15   | 19   | 23   | 20   | 3                             | 5    | 5    | 7    | 7    |
| Male  | 14                           | 16   | 28   | 28   | 22   | 5                             | 5    | 9    | 10   | 9    |
| Female                                      | 11                           | 14   | 12   | 17   | 18   | 2                             | 4    | 1    | 4    | 5    |
| Hispanic                                    | 25                           | 29   | 34   | 34   | 33   | 7                             | 8    | 10   | 11   | 10   |
| Male  | 28                           | 30   | 35   | 36   | 34   | 8                             | 9    | 11   | 13   | 13   |
| Female                                      | 23                           | 27   | 33   | 32   | 32   | 6                             | 7    | 9    | 8    | 9    |
| <b>Grade</b>                                |                              |      |      |      |      |                               |      |      |      |      |
| Ninth                                       | 23                           | 28   | 31   | 33   | 28   | 8                             | 9    | 10   | 13   | 11   |
| Tenth                                       | 25                           | 28   | 33   | 35   | 35   | 11                            | 13   | 13   | 15   | 15   |
| Eleventh                                    | 32                           | 31   | 36   | 37   | 36   | 16                            | 15   | 19   | 19   | 19   |
| Twelfth                                     | 30                           | 35   | 38   | 40   | 43   | 16                            | 18   | 21   | 19   | 23   |

<sup>a</sup> Current smoking is smoking on 1 or more of the previous 30 days.

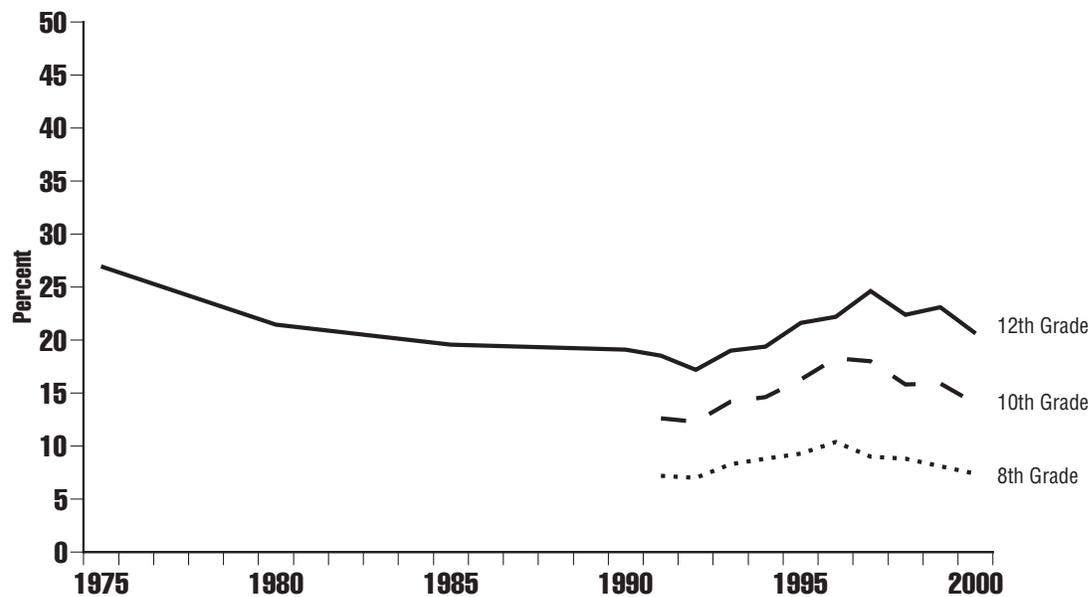
<sup>b</sup> Frequent smoking is smoking on 20 or more of the previous 30 days.

<sup>c</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System, 1990-1991. (Table 1) (current smoking); (Table 1), and unpublished data results Q28 (frequent smoking); Kann et al., 1995, (Table 12); Centers for Disease Control and Prevention. 2000. Youth Risk Behavior Surveillance. United States, 1999. *Morbidity and Mortality Weekly Report*, 49(SS-5); 1-96.

Figure SD 3.1

Percentage of 8th-, 10th-, and 12th-grade students in the United States who reported smoking cigarettes daily over the previous 30 days: Selected years, 1975-2000



Sources: Johnston, O'Malley and Bachman, 2000. Prepublication detail tables provided by Monitoring the Future Study staff.

## **SD 3.2 Smokeless Tobacco Use Among Youth**

The use of smokeless tobacco— snuff and chewing tobacco—is associated with a substantially higher risk of developing oral cancer.<sup>40</sup> Since 1970, smokeless tobacco has gone from a product used primarily by older men to one for which young men comprise the largest portion of the market. In 1970, males 65 and older (12.7 percent) were almost six times as likely as those ages 18-24 (2.2 percent) to use smokeless tobacco regularly. By 1991, however, young males (8.4 percent) were 50 percent more likely than the oldest ones (5.6 percent) to be regular smokeless tobacco users.<sup>41</sup> Data from the Monitoring the Future Study indicate that smokeless tobacco use among youth has generally decreased in recent years. Data from the Youth Risk Behavior Survey provide additional information about smokeless tobacco use by males and females within racial and Hispanic groups. These numbers from Monitoring the Future are supported by Youth Risk Behavior data in Table SD 3.2.B.

**Differences by Age.** Data from the Monitoring the Future study indicate that, as age and/or grade increases, so does the prevalence of smokeless tobacco use.<sup>42</sup> In 2000, the percentage of students who reported using smokeless tobacco over the previous 30 days was 4.2 percent among 8th graders, 6.1 percent among 10th graders, and 7.6 percent among 12th-grade students (see Table SD 3.2.A).

**Differences by Gender.** While rates of youth cigarette smoking are similar among males and females (see section SD 3.1), male students in the 8th, 10th, and 12th grades are more likely to use smokeless tobacco than are female students (see Figure SD 3.2.A). In 2000, among 12th-grade students, 14.4 percent of males and 1.3 percent of females reported smokeless tobacco use (see Table SD 3.2.A). These numbers from Monitoring the Future are supported by Youth Risk Behavior data in Table SD 3.2.B.

**Differences by Race and Hispanic Origin.**<sup>43</sup> The use of smokeless tobacco is most prevalent among White youth. In 2000, 10.5 percent of White 12th graders reported having used smokeless tobacco one or more times in the 30 days preceding the survey, compared with 3.8 percent of Hispanic and 1.5 percent of Black 12th graders (see Table SD 3.2.A).

The Youth Risk Behavior Survey provides additional subgroup information for 9th- through 12th-grade students combined. According to this survey's most recent administration in 1999, the use of smokeless tobacco is most prevalent among White, non-Hispanic high school students, with 10 percent reporting having used smokeless tobacco one or more times in the 30 days preceding the survey, compared with 4 percent of Hispanic youth and 1 percent of Black, non-Hispanic youth (see Figure SD 3.2.B).

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<sup>40</sup> Centers for Disease Control and Prevention. 1999. *Targeting Tobacco Use: The Nation's Leading Cause of Death: At-a-Glance*. Atlanta, GA.: Author. See also Tomar, S.L., and Henningfield, J.E. 1995. Additional Evidence Implicating Moist Snuff as a Potent Carcinogen. *Journal of the National Cancer Institute* 87(24):1822-1823.

<sup>41</sup> Centers for Disease Control and Prevention, 1994. Surveillance for Selected Tobacco-Use Behaviors – United States, 1900-1994. *Morbidity and Mortality Weekly Report*, 43(SS-3).

<sup>42</sup> According to the Centers for Disease Control and Prevention, differences by grade are not statistically significant.

<sup>43</sup> Monitoring the Future data shown in Table SD 3.2.A and Figure SD 3.2.A include Hispanics in the estimates of Whites and Blacks. Youth Risk Behavior data shown in Table SD 3.2.B and Figure SD 3.2.B exclude Hispanics from those racial categories. Persons of Hispanic origin may be of any race.

**SOCIAL DEVELOPMENT AND BEHAVIORAL HEALTH**

**Table SD 3.2.A**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who reported using smokeless tobacco over the previous 30 days, by grade, gender, and race and Hispanic origin: 1992-2000

|                                       | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|
| <b>8th Grade</b>                      |      |      |      |      |      |      |      |      |      |
| Total                                 | 7.0  | 6.6  | 7.7  | 7.1  | 7.1  | 5.5  | 4.8  | 4.5  | 4.2  |
| Gender                                |      |      |      |      |      |      |      |      |      |
| Male                                  | 12.5 | 10.9 | 12.8 | 11.8 | 11.4 | 9.9  | 8.1  | 6.9  | 6.7  |
| Female                                | 2.0  | 2.7  | 2.4  | 2.9  | 2.9  | 1.5  | 1.5  | 2.1  | 1.8  |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |
| White                                 | 8.3  | 8.0  | 8.1  | 8.9  | 8.8  | 7.6  | 6.1  | 5.4  | 5.2  |
| Black                                 | 1.8  | 2.7  | 3.2  | 2.6  | 2.2  | 2.6  | 2.3  | 2.3  | 2.7  |
| Hispanic                              | 4.2  | 4.0  | 5.0  | 5.7  | 5.2  | 4.6  | 4.5  | 4.6  | 3.7  |
| <b>10th Grade</b>                     |      |      |      |      |      |      |      |      |      |
| Total                                 | 9.6  | 10.4 | 10.5 | 9.7  | 8.6  | 8.9  | 7.5  | 6.5  | 6.1  |
| Gender                                |      |      |      |      |      |      |      |      |      |
| Male                                  | 18.1 | 19.3 | 19.2 | 17.2 | 15.0 | 14.9 | 13.8 | 12.2 | 11.4 |
| Female                                | 1.8  | 2.0  | 2.1  | 2.1  | 2.3  | 2.7  | 1.7  | 1.3  | 1.3  |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |
| White                                 | 11.4 | 12.0 | 12.5 | 12.0 | 11.0 | 10.4 | 10.0 | 8.7  | 7.5  |
| Black                                 | 2.9  | 2.3  | 2.3  | 2.5  | 2.5  | 2.8  | 2.3  | 1.6  | 2.0  |
| Hispanic                              | 6.2  | 6.1  | 4.3  | 3.6  | 4.0  | 4.6  | 4.8  | 4.8  | 4.5  |
| <b>12th Grade</b>                     |      |      |      |      |      |      |      |      |      |
| Total                                 | 11.4 | 10.7 | 11.1 | 12.2 | 9.8  | 9.7  | 8.8  | 8.4  | 7.6  |
| Gender                                |      |      |      |      |      |      |      |      |      |
| Male                                  | 20.8 | 19.7 | 20.3 | 23.6 | 19.5 | 18.7 | 15.6 | 15.5 | 14.4 |
| Female                                | 2.0  | 2.3  | 2.6  | 1.8  | 1.1  | 1.2  | 1.5  | 1.3  | 1.3  |
| Race and Hispanic origin <sup>a</sup> |      |      |      |      |      |      |      |      |      |
| White                                 | —    | 13.8 | 13.8 | 13.8 | 13.0 | 12.2 | 11.8 | 11.0 | 10.5 |
| Black                                 | —    | 2.0  | 1.9  | 2.1  | 2.7  | 2.2  | 1.4  | 1.5  | 1.5  |
| Hispanic                              | —    | 6.0  | 5.4  | 7.6  | 8.1  | 5.3  | 4.3  | 3.9  | 3.8  |

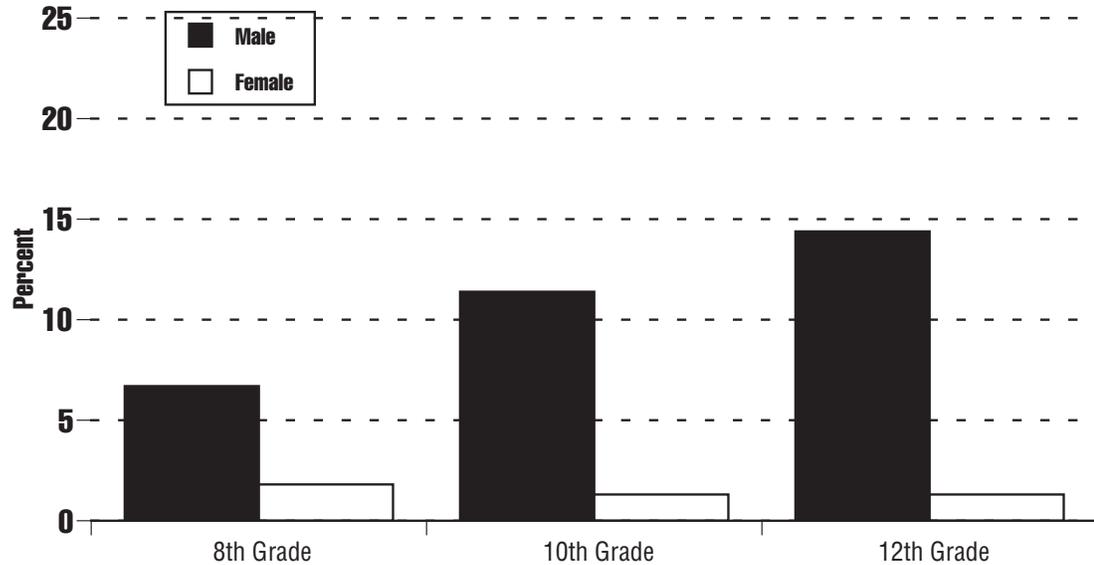
<sup>a</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Estimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Sources: Johnston, O'Malley, and Bachman, 2001, *Monitoring the Future: National Results on Adolescent Drug Use, Overview of Key Findings 2000*. University of Michigan, National Institute on Drug Abuse and the U.S. Department of Health and Human Services, National Institutes of Health. Washington, DC: U.S. Government Printing Office,

## Behavioral Health: Smoking, Alcohol, and Substance Abuse

**Figure SD 3.2.A**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who reported using smokeless tobacco during the previous 30 days, by gender: 2000



Sources: Johnston, O'Malley, & Bachman, 2001, *Monitoring the Future: National Results on Adolescent Drug Use, Overview of Key Findings 2000*.

**Table SD 3.2.B**

Percentage of students in grades 9 through 12 in the United States who reported having used smokeless tobacco during the previous 30 days,<sup>a</sup> by gender and by race and Hispanic origin:<sup>b</sup> Selected years, 1991-1999

|   | 1991  |      |        | 1993  |      |        | 1995  |      |        | 1997  |      |        | 1999  |      |        |
|---|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|
|   | Total | Male | Female |
| <b>Total</b>                                | 11    | 19   | 1      | 12    | 20   | 2      | 11    | 20   | 2      | 9     | 16   | 2      | 8     | 14   | 1      |
| <b>Race and Hispanic origin<sup>b</sup></b> |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |
| White, non-Hispanic                         | 13    | 24   | 1      | 15    | 26   | 2      | 15    | 25   | 3      | 12    | 21   | 2      | 10    | 19   | 2      |
| Black, non-Hispanic                         | 2     | 4    | 1      | 3     | 5    | 1      | 2     | 4    | 1      | 2     | 3    | 1      | 1     | 3    | 0      |
| Hispanic                                    | 6     | 11   | 1      | 5     | 8    | 2      | 4     | 6    | 3      | 5     | 8    | 1      | 4     | 6    | 2      |

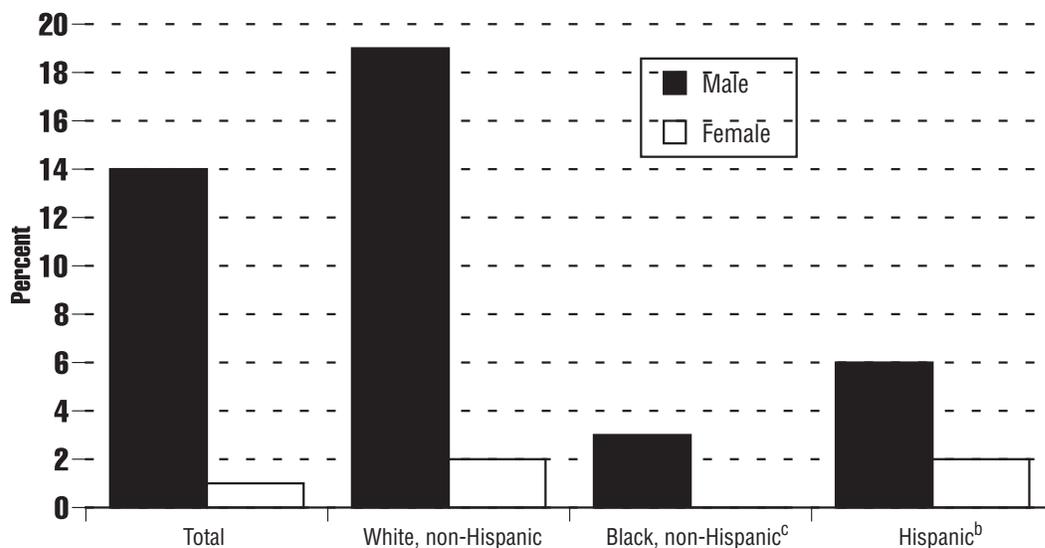
<sup>a</sup> In 1991 and 1993, students were asked whether they had used chewing tobacco or snuff during the 30 days preceding the survey; in 1995, 1997, and 1999, students were asked how many days they had used chewing tobacco or snuff during the 30 days preceding the survey.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention. 1990-1991, (Table 1); Kann et al., 1995, (Table 12); Kann et al., 1996, (Table 12); Kann et al., 1998, (Table 12). Kann et al., 1999, (Table 16).

**Figure SD 3.2.B**

Percentage of students in grades 9 through 12 in the United States who reported having used smokeless tobacco during the previous 30 days,<sup>a</sup> by gender and by race and Hispanic origin:<sup>b</sup> 1999



<sup>a</sup> In 1991 and 1993, students were asked whether they had used chewing tobacco or snuff during the 30 days preceding the survey; in 1995, 1997, and 1999, students were asked how many days they had used chewing tobacco or snuff during the 30 days preceding the survey.

<sup>b</sup> Persons of Hispanic origin may be of any race.

<sup>c</sup> Zero percent of non-Hispanic Black females reported using smokeless tobacco in 1999.

Source: Kann et al. 1999, (Table 16).

### **SD 3.3 Alcohol Use Among Youth**

Alcohol use among adolescents is linked to a host of problems, including motor vehicle crashes and deaths, difficulties in school and the workplace, fighting, and breaking the law.<sup>44</sup> The National Institute on Alcohol Abuse and Alcoholism finds that the younger the age of drinking onset, the greater the chance that an individual at some point in life will develop a clinically defined alcohol disorder.<sup>45</sup> In addition, *binge drinking* by youth at some point in the previous 2 weeks is associated with higher levels of illicit drug use.<sup>46</sup>

Among 12th-grade students, rates of binge drinking fell from a high of 41.4 percent in 1981 to 27.5 percent in 1993. However, between 1995 and 2000, rates have remained steady at around 30 percent (see Table SD 3.3.A).<sup>47</sup> Having an alcoholic beverage on one or more occasions in the previous 30 days was reported by 52 percent of 12th-grade students in 1998 but dropped slightly to 50 percent in 2000 (see Table SD 3.3.B).

**Differences by Age.** Binge drinking increases as students move into the upper grade levels (see Figure SD 3.3.A). In 2000, 14.1 percent of 8th-grade students reported binge drinking, while more than twice this percentage (30.0 percent) reported binge drinking in the 12th grade. A larger percentage point increase in binge drinking occurs between the 8th and 10th grades than in the period between the 10th and 12th grades (see Table SD 3.3.A).

**Differences by Gender.** Male students report higher rates of binge drinking than do female students. The disparity in binge drinking rates between males and females is greater in the upper grades, with 36.7 percent of males and 23.5 percent of females in the 12th grade reporting binge drinking in 2000 (see Table SD 3.3.A). Similar disparities exist for *regular drinking* (see Table 3.3.B).

**Differences by Race and Hispanic Origin.**<sup>48</sup> Hispanic youth in the 8th grade are more likely than their White and Black peers to engage in binge drinking. By the 12th grade, however, White students report a higher prevalence of binge drinking than do either Hispanic or Black students. Black students consistently report the lowest prevalence of binge drinking for all grades and across all years (see Table SD 3.3.A).

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<sup>44</sup> Petraitis, J., and Flay, B.R. 1995. Reviewing Theories of Adolescent Substance Use: Organizing Pieces in the Puzzle. *Psychological Bulletin* 117(1):67-86.

<sup>45</sup> Grant, B.R., and Dawson, D.A. Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse*, 9:103-110.

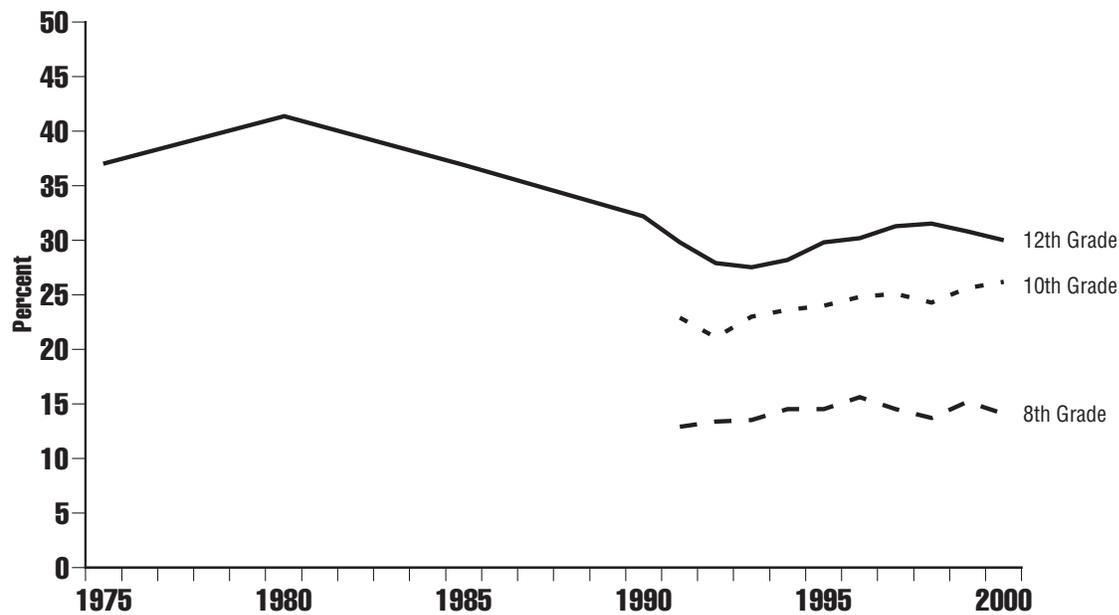
<sup>46</sup> Substance Abuse and Mental Health Services Administration. 1996. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Rockville, MD: Public Health Service.

<sup>47</sup> These percentages likely underestimate the rate of binge drinking among all youth, because school-age youth who are not in school are somewhat more likely to binge drink than those in school. (Based on unpublished prevalence rates of past-month alcohol use among youth ages 12 through 17 by school status, enrolled or not enrolled, from the 1994-95 National Household Surveys on Drug Abuse.)

<sup>48</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Figure SD 3.3.A

Percentage of 8th-, 10th-, and 12th-grade students who reported binge drinking:<sup>a</sup> Selected years, 1975-2000



<sup>a</sup> Binge drinking means having five or more drinks in a row in the previous 2 weeks.

Sources: Johnston, O'Malley, and Bachman, 2000, (8th and 10th grade Table D-27 and D-31); (12th grade Table D-28 and D-32).

**Behavioral Health: Smoking, Alcohol, and Substance Abuse**

**Table SD 3.3.A**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who reported binge drinking,<sup>a</sup> by gender and by race and Hispanic origin: Selected years, 1975-2000

|                                       | 1975 | 1980 | 1985 | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|
| <b>8th Grade</b>                      |      |      |      |      |      |      |      |      |      |      |
| Total                                 | —    | —    | —    | —    | 14.5 | 15.6 | 14.5 | 13.7 | 15.2 | 14.1 |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | —    | —    | —    | —    | 15.1 | 16.5 | 15.3 | 14.4 | 16.4 | 14.4 |
| Female                                | —    | —    | —    | —    | 13.9 | 14.5 | 13.5 | 12.7 | 13.9 | 13.6 |
| Race and Hispanic origin <sup>b</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | —    | —    | —    | 13.9 | 15.1 | 15.1 | 14.1 | 14.3 | 14.9 |
| Black                                 | —    | —    | —    | —    | 10.8 | 10.4 | 9.8  | 9.0  | 9.9  | 10.0 |
| Hispanic                              | —    | —    | —    | —    | 22.0 | 21.0 | 20.7 | 20.4 | 20.9 | 19.1 |
| <b>10th Grade</b>                     |      |      |      |      |      |      |      |      |      |      |
| Total                                 | —    | —    | —    | —    | 24.0 | 24.8 | 25.1 | 24.3 | 25.6 | 26.2 |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | —    | —    | —    | —    | 26.3 | 27.2 | 28.6 | 26.7 | 29.7 | 29.8 |
| Female                                | —    | —    | —    | —    | 21.5 | 22.3 | 21.7 | 22.2 | 21.8 | 22.5 |
| Race and Hispanic origin <sup>b</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | —    | —    | —    | 25.4 | 26.2 | 26.9 | 27.0 | 27.2 | 28.1 |
| Black                                 | —    | —    | —    | —    | 13.3 | 12.2 | 12.7 | 12.8 | 12.7 | 12.9 |
| Hispanic                              | —    | —    | —    | —    | 26.8 | 29.6 | 27.5 | 26.3 | 27.5 | 28.3 |
| <b>12th Grade</b>                     |      |      |      |      |      |      |      |      |      |      |
| Total                                 | 36.8 | 41.2 | 36.7 | 32.2 | 29.8 | 30.2 | 31.3 | 31.5 | 30.8 | 30.0 |
| Gender                                |      |      |      |      |      |      |      |      |      |      |
| Male                                  | 49.0 | 52.1 | 45.3 | 39.1 | 36.9 | 37.0 | 37.9 | 39.2 | 38.1 | 36.7 |
| Female                                | 26.4 | 30.5 | 28.2 | 24.4 | 23.0 | 23.5 | 24.4 | 24.0 | 23.6 | 23.5 |
| Race and Hispanic origin <sup>b</sup> |      |      |      |      |      |      |      |      |      |      |
| White                                 | —    | 44.3 | 41.5 | 36.6 | 32.3 | 33.4 | 35.1 | 36.4 | 35.7 | 34.6 |
| Black                                 | —    | 17.7 | 15.7 | 14.4 | 14.9 | 15.3 | 13.4 | 12.3 | 12.3 | 11.5 |
| Hispanic                              | —    | 33.1 | 31.7 | 25.6 | 26.6 | 27.1 | 27.6 | 28.1 | 29.3 | 31.0 |

<sup>a</sup> Binge drinking means having five or more drinks in a row in the previous 2 weeks.

<sup>b</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Estimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Sources: Johnston, O'Malley, and Bachman, 2000.

**SOCIAL DEVELOPMENT AND BEHAVIORAL HEALTH**

**Table SD 3.3.B**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who reported drinking alcohol on one or more occasions,<sup>a</sup> by gender: Selected years, 1998-2000

|                   | 1998 | 1999 | 2000 |
|-------------------|------|------|------|
| <b>8th Grade</b>  |      |      |      |
| Total             | 23.0 | 24.0 | 22.4 |
| Male              | 24.0 | 24.8 | —    |
| Female            | 21.9 | 23.3 | —    |
| <b>10th Grade</b> |      |      |      |
| Total             | 38.8 | 40.0 | 41.0 |
| Male              | 40.0 | 42.3 | —    |
| Female            | 37.7 | 38.1 | —    |
| <b>12th Grade</b> |      |      |      |
| Total             | 52.0 | 51.0 | 50.0 |
| Male              | 57.3 | 55.3 | —    |
| Female            | 46.9 | 46.8 | —    |

<sup>a</sup> Question indicated that a “drink” of alcohol is more than a few sips within the last 30 days. The form of this question changed in 1993 so the data in this report are not comparable to previous editions of this report.

Sources: Johnston, O’Malley, and Bachman, 2000.

### **SD 3.4 Exposure to Drunk Driving**

Motor vehicle crashes are a major cause of death in the United States for youth ages 15 through 19.<sup>49</sup> Among young Americans of driving age, the issue of alcohol-impaired driving has particular significance. In all states, the purchase of alcohol by persons under age 21 is illegal; however, in 1994, 29 percent of the 2,610 traffic fatalities involving persons ages 15 through 17 were alcohol-related. For traffic deaths involving persons ages 18 through 20, the percentage of alcohol involvement was 44 percent.<sup>50</sup>

In 1999, 36 percent of adolescents in grades 9 through 12 reported that within the month prior to the survey, they had either driven after drinking alcohol or had ridden with a driver who had been drinking alcohol (see Table SD 3.4). Since 1991, about two in five high school students have reported this level of exposure to drunk driving.

**Differences by Age.** Rates of exposure to drunk driving differed modestly by age. In 1999, 41 percent of 12th-grade students reported taking this risk, compared with 32 percent of 9th-grade students (see Figure SD 3.4).

**Differences by Gender.** In 1999, 38 percent of males and 34 percent of females reported driving after drinking alcohol or riding with someone who had been drinking (see Table SD 3.4).

**Differences by Race and Hispanic Origin.**<sup>51</sup> In 1999, 42 percent of Hispanic, 36 percent of non-Hispanic White, and 36 percent of non-Hispanic Black teens reported having been exposed to drunk driving within the past month (see Table SD 3.4).

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<sup>49</sup> Injury-related mortality (including motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others) accounted for 80 percent of all deaths of youth ages 15 through 19 in 1995. However, the rate of motor vehicle crash deaths among youth has been relatively constant since 1992.

<sup>50</sup> Update: Alcohol-Related Traffic Crashes and Fatalities among Youth and Young Adults—United States, 1982-1994. *Morbidity and Mortality Weekly Report*, 44:869-874.

<sup>51</sup> Persons of Hispanic origin may be of any race.

**SOCIAL DEVELOPMENT AND BEHAVIORAL HEALTH**

**Table SD 3.4**

Percentage of students in grades 9 through 12 in the United States who reported driving after drinking alcohol, or riding with a driver who had been drinking alcohol,<sup>a</sup> by gender, grade, and race and Hispanic origin: Selected years, 1991-1999

|   | 1991 | 1993 | 1995 | 1997 | 1999 |
|---|------|------|------|------|------|
| <b>Total</b>                                | 42   | 38   | 42   | 40   | 36   |
| <b>Gender</b>                               |      |      |      |      |      |
| Male  | 44   | 40   | 43   | 42   | 38   |
| Female                                      | 41   | 36   | 40   | 37   | 34   |
| <b>Grade</b>                                |      |      |      |      |      |
| Ninth                                       | 36   | 32   | 39   | 35   | 32   |
| Tenth                                       | 39   | 37   | 40   | 36   | 36   |
| Eleventh                                    | 45   | 39   | 41   | 42   | 35   |
| Twelfth                                     | 49   | 44   | 46   | 45   | 41   |
| <b>Race and Hispanic origin<sup>b</sup></b> |      |      |      |      |      |
| White, non-Hispanic                         | 43   | 37   | 41   | 40   | 36   |
| Black, non-Hispanic                         | 38   | 41   | 39   | 36   | 36   |
| Hispanic                                    | 49   | 45   | 52   | 47   | 42   |

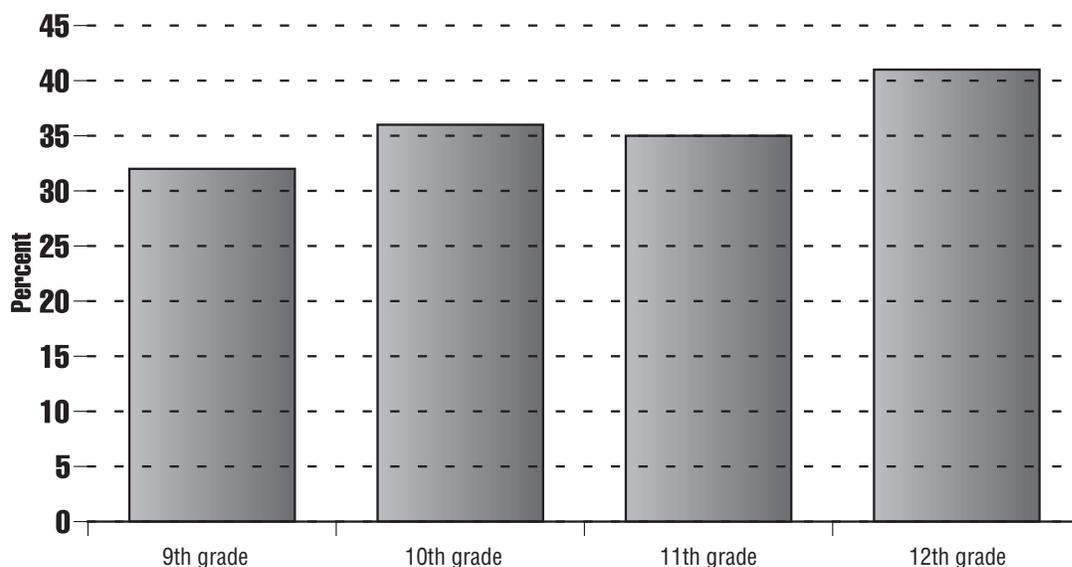
<sup>a</sup> Within the last 30 days.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Sources: Youth Risk Behavior Survey results, 1991, 1993, 1995, 1997, and 1999. Unpublished tabulations by Laura Kann, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

**Figure SD 3.4**

Percentage of students in grades 9 through 12 in the United States who reported driving after drinking alcohol or riding with a driver who had been drinking alcohol<sup>a</sup>, by grade: 1999



<sup>a</sup> Within the last 30 days.

Source: Youth Risk Behavior Survey results, 1999. Unpublished tabulations by Laura Kann, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

### **SD 3.5 Drug Use Among Youth**

Drug use by youth has serious and often long-term individual, social, and economic consequences. Drug use contributes to crime, decreases economic productivity, and requires a disproportionate share of health care services for those affected. Use of drugs is a preventable behavior that, when established during adolescence, can extend into adulthood.<sup>52</sup>

The effects of drug use on individual health and well-being have been well documented: for example, the use of cocaine has been linked with numerous health problems ranging from eating disorders to disability and even death from heart attack and stroke.<sup>53</sup> Marijuana use holds both health and cognitive risks, particularly for damage to pulmonary functions as a result of chronic use.<sup>54</sup> *Hallucinogens* can affect brain chemistry and result in problems both in learning new information and retaining knowledge.<sup>55</sup> And chronic use of some inhalants may result in injury to the liver and kidneys as well as cause neurological damage.

**Differences by Specified Drugs.** Eighth, 10th, and 12th graders have consistently been more likely to use marijuana<sup>56</sup> than inhalants, hallucinogens, or cocaine. Beginning in 1994, marijuana use in all three grades had surpassed prevalence rates of other drugs shown (see Table SD 3.5.A). This increase in the use of marijuana corresponds with a decline in its perceived harmfulness by students across all grade levels from 1991 to 1998.<sup>57</sup> In recent years, cocaine use has been least prevalent among the four drug types examined in this section among all grade levels (see Figure SD 3.5.B). Hallucinogens have low prevalence rates among 8th graders in 2000 (1.2 percent), but its use surpasses the use of inhalants in the upper grade levels (see Table SD 3.5.A).

**Differences by Age.** As seen with cigarette and alcohol use (see Sections SD 3.1 and SD 3.3), use of both marijuana and hallucinogens increases with grade level. This increase is relatively small for hallucinogen use but is substantial for marijuana use. In 2000, more than twice the percentage of 12th graders reported using marijuana in the past 30 days compared to 8th grade students. In contrast, inhalant use is more prevalent in the 8th grade than in either the 10th or the 12th grade (see Table SD 3.5.A).

**Differences by Gender.** Male high school students appear somewhat more likely than females to report use of marijuana, inhalants, hallucinogens, and cocaine. The largest gender difference is seen in marijuana use and is most apparent in the upper grade levels. This gender gap for marijuana is about 6 percentage points among high school seniors in 2000 (see Table SD 3.5.A).

**Differences by Race and Hispanic Origin.**<sup>58</sup> For each category of drug use shown, as well as for use of any *illicit drugs*, Black students consistently report the lowest rates of use across all grades (see Tables SD 3.5.B and SD 3.5.C).

<sup>52</sup> Johnson, R.A., Hoffmann, J.P., and Gerstein, D.R. July 1996. *The Relationship Between Family Structure and Adolescent Substance Use*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

<sup>53</sup> Blanken, A.J. 1993. Measuring Use of Alcohol and Other Drugs among Adolescents. *Public Health Reports* (Journal of the U.S. Public Health Service), 108(Supp. 1).

<sup>54</sup> See, for example, Marijuana: Facts Parents Need to Know, National Institute on Drug Abuse, U.S. Department of Health and Human Services, NCADI Pub. No. PHD712, 1995; and Pope, H., and Yurgelun-Todd, D. 1996. The Residual Cognitive Effects of Heavy Marijuana Use in College Students. *Journal of the American Medical Association*, 275(7).

<sup>55</sup> "Measuring the Health Behavior of Adolescents: The Youth Risk Behavior Surveillance System and Recent Reports on High-Risk Adolescents." 1993. *Public Health Reports*, 108(Supp. 1). Rockville, MD: Public Health Service.

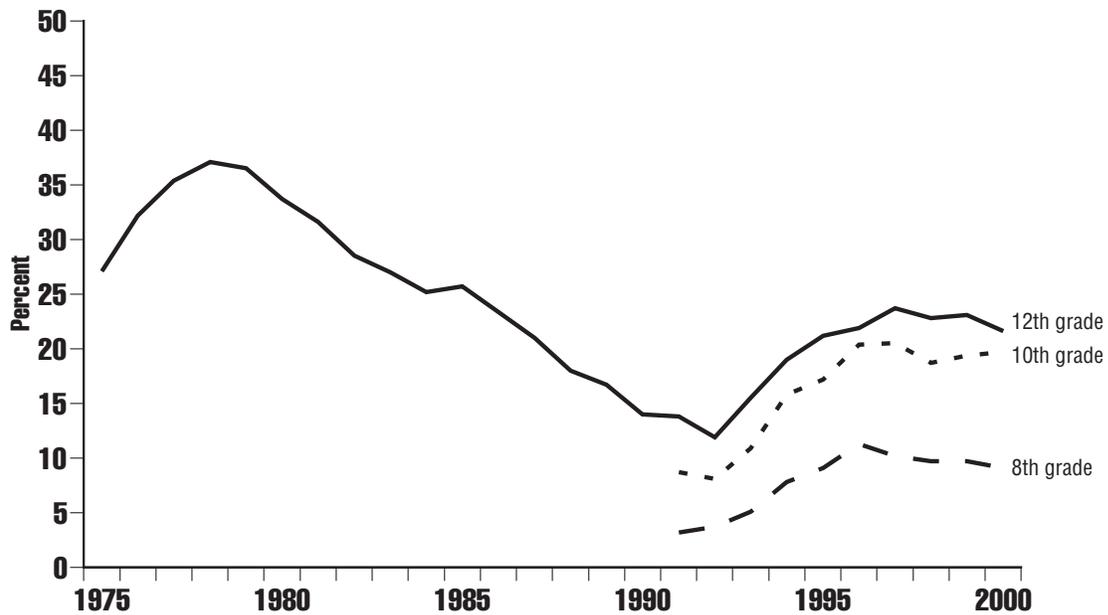
<sup>56</sup> These percentages likely underestimate the rate of drug use among all youth because school-age youth who are not in school are somewhat more likely to use drugs than those in school.

<sup>57</sup> Johnston, O'Malley, and Bachman, 2000. *Monitoring the Future Study*.

<sup>58</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

**Figure SD 3.5.A**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used marijuana within the previous 30 days: Selected years, 1975-2000



Sources: Johnston, O'Malley, and Bachman, 2000, (Tables 4-7); also, prior years of this publication. Additional historical data tables provided by Monitoring the Future Study staff.

**Behavioral Health: Smoking, Alcohol, and Substance Abuse**

**Table SD 3.5.A**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used specified drugs within the previous 30 days, by grade and gender: Selected years, 1975-2000

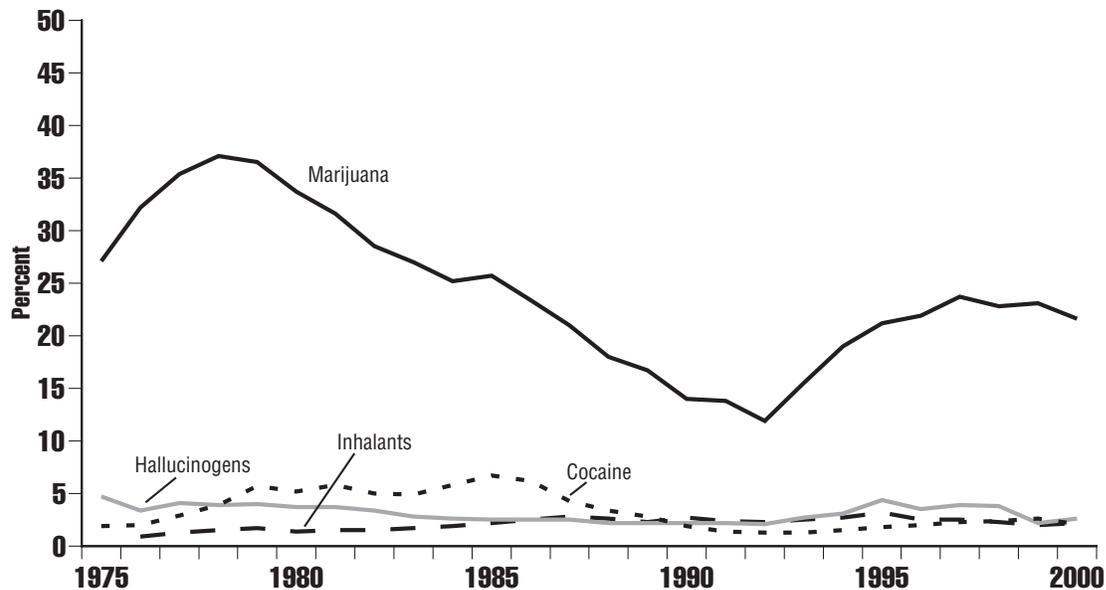
|                                  | 1975 | 1980 | 1985 | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|
| <b>Marijuana</b>                 |      |      |      |      |      |      |      |      |      |      |
| 8th grade                        | —    | —    | —    | —    | 9.1  | 11.3 | 10.2 | 9.7  | 9.7  | 9.1  |
| Male                             | —    | —    | —    | —    | 9.8  | 12.1 | 11.4 | 10.3 | 10.5 | 10.2 |
| Female                           | —    | —    | —    | —    | 8.2  | 10.2 | 8.9  | 8.8  | 8.8  | 7.8  |
| 10th grade                       | —    | —    | —    | —    | 17.2 | 20.4 | 20.5 | 18.7 | 19.4 | 19.7 |
| Male                             | —    | —    | —    | —    | 19.1 | 22.3 | 23.0 | 20.3 | 21.8 | 23.3 |
| Female                           | —    | —    | —    | —    | 15.0 | 18.6 | 17.9 | 17.2 | 17.0 | 16.2 |
| 12th grade                       | 27.1 | 33.7 | 25.7 | 14.0 | 21.2 | 21.9 | 23.7 | 22.8 | 23.1 | 21.6 |
| Male                             | 32.3 | 37.8 | 28.7 | 16.1 | 24.6 | 25.1 | 26.4 | 26.5 | 26.3 | 24.7 |
| Female                           | 22.5 | 29.1 | 22.4 | 11.5 | 17.2 | 18.3 | 20.3 | 18.8 | 19.7 | 18.3 |
| <b>Inhalants<sup>a</sup></b>     |      |      |      |      |      |      |      |      |      |      |
| 8th grade                        | —    | —    | —    | —    | 6.1  | 5.8  | 5.6  | 4.8  | 5.0  | 4.5  |
| Male                             | —    | —    | —    | —    | 5.6  | 4.8  | 5.1  | 4.8  | 4.6  | 4.1  |
| Female                           | —    | —    | —    | —    | 6.6  | 6.6  | 5.8  | 4.7  | 5.3  | 4.8  |
| 10th grade                       | —    | —    | —    | —    | 3.5  | 3.3  | 3.0  | 2.9  | 2.6  | 2.6  |
| Male                             | —    | —    | —    | —    | 3.8  | 3.4  | 3.0  | 3.2  | 2.9  | 3.0  |
| Female                           | —    | —    | —    | —    | 3.2  | 3.2  | 2.9  | 2.6  | 2.2  | 2.2  |
| 12th grade                       | —    | 1.4  | 2.2  | 2.7  | 3.2  | 2.5  | 2.5  | 2.3  | 2.0  | 2.2  |
| Male                             | —    | 1.8  | 2.8  | 3.5  | 3.9  | 3.1  | 3.3  | 2.9  | 2.5  | 2.9  |
| Female                           | —    | 1.0  | 1.7  | 2.0  | 2.5  | 2.0  | 1.8  | 1.7  | 1.5  | 1.7  |
| <b>Hallucinogens<sup>b</sup></b> |      |      |      |      |      |      |      |      |      |      |
| 8th grade                        | —    | —    | —    | —    | 1.7  | 1.9  | 1.8  | 1.4  | 1.3  | 1.2  |
| Male                             | —    | —    | —    | —    | 1.8  | 2.0  | 2.2  | 1.7  | 1.6  | 1.2  |
| Female                           | —    | —    | —    | —    | 1.5  | 1.6  | 1.3  | 1.1  | 1.0  | 1.2  |
| 10th grade                       | —    | —    | —    | —    | 3.3  | 2.8  | 3.3  | 3.2  | 2.9  | 2.3  |
| Male                             | —    | —    | —    | —    | 3.9  | 3.3  | 4.0  | 3.5  | 3.6  | 2.9  |
| Female                           | —    | —    | —    | —    | 2.7  | 2.3  | 2.5  | 2.9  | 2.2  | 1.6  |
| 12th grade                       | 4.7  | 3.7  | 2.5  | 2.2  | 4.4  | 3.5  | 3.9  | 3.8  | 3.5  | 2.6  |
| Male                             | 6.0  | 4.8  | 3.4  | 3.2  | 5.8  | 4.7  | 5.1  | 5.1  | 4.5  | 3.3  |
| Female                           | 3.6  | 2.5  | 1.4  | 1.0  | 2.7  | 2.3  | 2.7  | 2.3  | 2.3  | 1.6  |
| <b>Cocaine</b>                   |      |      |      |      |      |      |      |      |      |      |
| 8th grade                        | —    | —    | —    | —    | 1.2  | 1.3  | 1.1  | 1.4  | 1.3  | 1.2  |
| Male                             | —    | —    | —    | —    | 1.1  | 1.2  | 1.2  | 1.5  | 1.4  | 1.3  |
| Female                           | —    | —    | —    | —    | 1.2  | 1.4  | 1.0  | 1.2  | 1.2  | 1.1  |
| 10th grade                       | —    | —    | —    | —    | 1.7  | 1.7  | 2.0  | 2.1  | 1.8  | 1.8  |
| Male                             | —    | —    | —    | —    | 1.8  | 1.8  | 1.9  | 2.4  | 2.2  | 2.1  |
| Female                           | —    | —    | —    | —    | 1.5  | 1.6  | 1.8  | 1.8  | 1.6  | 1.4  |
| 12th grade                       | 1.9  | 5.2  | 6.7  | 1.9  | 1.8  | 2.0  | 2.3  | 2.4  | 2.6  | 2.1  |
| Male                             | 2.5  | 6.0  | 7.7  | 2.3  | 2.2  | 2.6  | 2.8  | 3.0  | 3.3  | 2.7  |
| Female                           | 1.2  | 4.3  | 5.6  | 1.3  | 1.3  | 1.4  | 1.6  | 1.7  | 1.8  | 1.6  |

<sup>a</sup> All data are unadjusted for underreporting of nitrites. Data for 12th grade only, based on three of six questionnaire forms, with sample size one-half of total sample size.

Sources: Johnston, O'Malley, and Bachman, 2000. (Tables 4-7), and prior years of this publication. Additional historical data tables provided by Monitoring the Future Study staff.

Figure SD 3.5.B

Percentage of 12th-grade students in the United States who report having used specified drugs within the previous 30 days: 1975-2000



<sup>a</sup> All data on inhalants are unadjusted for underreporting of nitrites.

<sup>b</sup> All data on hallucinogens are unadjusted for underreporting of PCP.

Sources: Johnston, O'Malley, and Bachman, 2000, (Tables 4-7). Also, prior years of this publication. Additional historical data tables provided by Monitoring the Future Study staff.

**Behavioral Health: Smoking, Alcohol, and Substance Abuse**

**Table SD 3.5.B**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used specified drugs within the previous 30 days, by race and Hispanic origin:<sup>a</sup> 1992-2000

|                                    | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------------------------------------|------|------|------|------|------|------|------|------|------|
| <b>8th Grade</b>                   |      |      |      |      |      |      |      |      |      |
| <b>Marijuana<sup>a</sup></b>       |      |      |      |      |      |      |      |      |      |
| White                              | 3.3  | 4.1  | 5.6  | 7.8  | 10.0 | 10.6 | 9.5  | 8.7  | 8.4  |
| Black                              | 2.0  | 2.9  | 5.0  | 6.6  | 8.0  | 9.0  | 9.1  | 9.7  | 9.3  |
| Hispanic                           | 6.4  | 8.3  | 12.1 | 12.9 | 12.5 | 13.1 | 13.5 | 14.3 | 12.7 |
| <b>Inhalants<sup>a,b</sup></b>     |      |      |      |      |      |      |      |      |      |
| White                              | 4.7  | 5.4  | 6.0  | 6.6  | 6.8  | 6.5  | 5.9  | 5.5  | 5.2  |
| Black                              | 2.4  | 2.7  | 2.8  | 2.5  | 2.0  | 1.9  | 2.2  | 2.2  | 2.3  |
| Hispanic                           | 5.5  | 5.6  | 6.1  | 6.5  | 6.4  | 5.5  | 5.2  | 6.0  | 5.6  |
| <b>Hallucinogens<sup>a,c</sup></b> |      |      |      |      |      |      |      |      |      |
| White                              | 0.8  | 1.1  | 1.3  | 1.6  | 2.0  | 2.0  | 1.5  | 1.2  | 1.2  |
| Black                              | 0.4  | 0.4  | 0.4  | 0.4  | 0.5  | 0.4  | 0.4  | 0.4  | 0.5  |
| Hispanic                           | 1.9  | 1.9  | 1.8  | 1.9  | 2.2  | 2.3  | 2.5  | 2.3  | 2.0  |
| <b>Cocaine<sup>a</sup></b>         |      |      |      |      |      |      |      |      |      |
| White                              | 0.5  | 0.5  | 0.7  | 0.9  | 1.2  | 1.2  | 1.0  | 1.1  | 1.1  |
| Black                              | 0.4  | 0.4  | 0.3  | 0.4  | 0.4  | 0.3  | 0.4  | 0.4  | 0.4  |
| Hispanic                           | 1.7  | 1.8  | 2.2  | 2.5  | 2.3  | 2.1  | 2.5  | 3.2  | 2.7  |
| <b>10th Grade</b>                  |      |      |      |      |      |      |      |      |      |
| <b>Marijuana<sup>a</sup></b>       |      |      |      |      |      |      |      |      |      |
| White                              | 9.0  | 9.8  | 13.4 | 16.8 | 19.3 | 21.1 | 20.3 | 19.8 | 20.2 |
| Black                              | 3.6  | 4.9  | 9.8  | 13.8 | 15.9 | 16.5 | 15.3 | 14.6 | 15.8 |
| Hispanic                           | 10.4 | 12.4 | 15.6 | 17.7 | 19.1 | 21.3 | 21.4 | 20.6 | 20.5 |
| <b>Inhalants<sup>a,b</sup></b>     |      |      |      |      |      |      |      |      |      |
| White                              | 2.9  | 3.2  | 3.7  | 3.9  | 3.9  | 3.5  | 3.3  | 3.1  | 2.9  |
| Black                              | 2.0  | 2.0  | 1.6  | 1.3  | 1.2  | 1.2  | 1.1  | 1.0  | 1.1  |
| Hispanic                           | 3.0  | 3.0  | 3.4  | 3.4  | 2.9  | 2.9  | 2.9  | 2.6  | 2.3  |
| <b>Hallucinogens<sup>a,c</sup></b> |      |      |      |      |      |      |      |      |      |
| White                              | 2.0  | 2.1  | 2.3  | 3.1  | 3.5  | 3.4  | 3.5  | 3.5  | 2.9  |
| Black                              | 0.2  | 0.3  | 0.7  | 0.8  | 0.5  | 0.6  | 0.7  | 0.6  | 0.5  |
| Hispanic                           | 1.4  | 1.8  | 2.2  | 2.7  | 3.1  | 3.3  | 3.8  | 3.0  | 2.0  |
| <b>Cocaine<sup>a</sup></b>         |      |      |      |      |      |      |      |      |      |
| White                              | 0.7  | 0.8  | 0.9  | 1.4  | 1.6  | 1.7  | 1.9  | 2.0  | 1.8  |
| Black                              | 0.1  | 0.2  | 0.6  | 0.6  | 0.4  | 0.4  | 0.6  | 0.5  | 0.3  |
| Hispanic                           | 1.1  | 1.2  | 1.8  | 2.4  | 2.9  | 3.6  | 3.9  | 3.6  | 3.0  |

**SOCIAL DEVELOPMENT AND BEHAVIORAL HEALTH**

**Table SD 3.5.B continued**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used specified drugs within the previous 30 days, by race and Hispanic origin:<sup>a</sup> 1992-2000

|                                    | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------------------------------------|------|------|------|------|------|------|------|------|------|
| <b>12th Grade</b>                  |      |      |      |      |      |      |      |      |      |
| <b>Marijuana<sup>a</sup></b>       |      |      |      |      |      |      |      |      |      |
| White                              | 14.1 | 14.9 | 18.4 | 20.8 | 22.0 | 23.6 | 24.4 | 23.8 | 22.7 |
| Black                              | 6.1  | 8.1  | 13.1 | 16.8 | 18.3 | 18.5 | 18.3 | 19.3 | 19.0 |
| Hispanic                           | 12.7 | 12.5 | 14.9 | 17.9 | 19.1 | 21.2 | 21.6 | 22.0 | 24.6 |
| <b>Inhalants<sup>a,b</sup></b>     |      |      |      |      |      |      |      |      |      |
| White                              | 2.4  | 2.6  | 2.8  | 3.3  | 3.3  | 3.0  | 2.8  | 2.4  | 2.1  |
| Black                              | 1.5  | 1.4  | 1.5  | 1.4  | 1.0  | 0.9  | 0.9  | 0.8  | 1.3  |
| Hispanic                           | 2.5  | 2.1  | 2.3  | 2.3  | 2.1  | 1.7  | 1.8  | 2.3  | 3.1  |
| <b>Hallucinogens<sup>a,c</sup></b> |      |      |      |      |      |      |      |      |      |
| White                              | 2.5  | 2.9  | 3.3  | 4.1  | 4.4  | 4.3  | 4.5  | 4.1  | 3.2  |
| Black                              | 0.3  | 0.5  | 0.8  | 0.7  | 0.6  | 0.9  | 0.7  | 0.6  | 0.9  |
| Hispanic                           | 1.5  | 1.7  | 2.0  | 3.4  | 4.0  | 2.9  | 2.8  | 3.1  | 3.8  |
| <b>Cocaine<sup>a</sup></b>         |      |      |      |      |      |      |      |      |      |
| White                              | 1.5  | 1.2  | 1.3  | 1.6  | 1.9  | 2.2  | 2.5  | 2.7  | 2.5  |
| Black                              | 0.7  | 0.4  | 0.5  | 0.5  | 0.4  | 0.5  | 0.6  | 0.4  | 0.8  |
| Hispanic                           | 1.9  | 2.4  | 2.3  | 2.3  | 3.2  | 3.3  | 2.7  | 2.8  | 3.6  |

<sup>a</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Estimates represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

<sup>b</sup> Inhalants include substances such as glues and aerosols. Data for 12th-grade students based on five of six forms. Data are unadjusted for known underreporting of nitrites.

<sup>c</sup> Hallucinogens include substances such as LSD. Data are unadjusted for known underreporting of PCP.

Sources: Johnston, O'Malley, and Bachman, 2000, (Tables 4-9). Also, prior years of this publication (Table 10 for 1992-1995, Tables 4-9 thereafter).

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**Table SD 3.5.C**

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used any illicit drugs<sup>a</sup> in the previous 30 days, and 12th-grade reports of illicit drug use by gender and by race and Hispanic origin: Selected years, 1985-2000

|                                       | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Grade</b>                          |      |      |      |      |      |      |      |      |      |      |      |      |
| Eighth                                | —    | —    | 5.7  | 6.8  | 8.4  | 10.9 | 12.4 | 14.6 | 12.9 | 12.1 | 12.2 | 11.9 |
| Tenth                                 | —    | —    | 11.6 | 11.0 | 14.0 | 18.5 | 20.2 | 23.2 | 23.0 | 21.5 | 22.1 | 22.5 |
| Twelfth                               | 29.7 | 17.2 | 16.4 | 14.4 | 18.3 | 21.9 | 23.8 | 24.6 | 26.2 | 25.6 | 25.9 | 24.9 |
| <b>12th Grade</b>                     |      |      |      |      |      |      |      |      |      |      |      |      |
| Gender                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Male                                  | 32.1 | 18.9 | 18.4 | 15.9 | 20.4 | 25.5 | 26.8 | 27.5 | 28.7 | 29.1 | 28.6 | 27.5 |
| Female                                | 26.7 | 15.2 | 14.1 | 12.7 | 15.9 | 18.3 | 20.4 | 21.2 | 23.2 | 21.6 | 22.7 | 22.1 |
| Race and Hispanic origin <sup>b</sup> |      |      |      |      |      |      |      |      |      |      |      |      |
| White                                 | 30.2 | 20.5 | 18.6 | 16.8 | 17.8 | 21.4 | 23.8 | 24.8 | 26.4 | 27.5 | 27.0 | 25.9 |
| Black                                 | 22.9 | 9.0  | 7.2  | 7.3  | 9.1  | 14.3 | 18.3 | 19.7 | 20.0 | 19.4 | 20.2 | 20.3 |
| Hispanic                              | 27.2 | 13.9 | 14.7 | 14.6 | 15.6 | 18.3 | 21.4 | 22.6 | 23.9 | 24.1 | 24.4 | 27.4 |

<sup>a</sup> For 12th graders only: Use of “any illicit drug” includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin, or any use of other opiates, stimulants, barbiturates, or tranquilizers not under a doctor’s orders. For 8th and 10th graders only: The use of other opiates and barbiturates has been excluded, because these younger respondents appear to overreport use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup> Estimates for Whites and Blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Estimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Sources: Johnston, O’Malley, and Bachman, 2000. Some data for 1998: The Monitoring the Future Study, The University of Michigan. *Drug Use among American Young People Begins to Turn Downward*. Press release of December 18, 1998, (Table 1b). 1119; and unpublished data from Monitoring the Future Study staff.



### **SD 3.6 Peer Attitudes Toward Alcohol, and Other Controlled Substances**

Drug use is correlated with attitudes and beliefs about drugs, both in terms of perceived health risks and the level of peer disapproval.<sup>59</sup> As children reach adolescence, peer influences on personal behavior can take on increasing importance in determining the use of drugs, alcohol, and cigarettes.

The majority of high school seniors have long reported peer disapproval of drug and alcohol use and cigarette smoking, as reflected in their responses to questions of the level of disapproval they would receive from their peers for (1) taking one to two drinks nearly every day, (2) smoking marijuana even occasionally (as opposed to trying it once), (3) taking cocaine even occasionally (as opposed to trying it once), and (4) smoking one or more packs of cigarettes per day (see Table SD 3.6).

Among 12th graders, peer disapproval of drinking (one to two drinks nearly every day) and smoking marijuana (even occasionally) reached highs of 78 and 79 percent, respectively, in 1992, before declining to 72 and 64 percent by 2000 (see Figure SD 3.6). Peer disapproval of smoking cigarettes (one or more packs per day) has declined since 1992, although disapproval levels had been relatively stable prior to that time. In 2000, 73 percent of 12th graders reported peer disapproval of smoking a pack or more of cigarettes per day. Peer disapproval of cocaine use (even occasionally) increased from 87 percent in 1986 to 95 percent in 1991 and has remained at about this level. Cocaine use commands the highest level of peer disapproval for every year shown (see Table SD 3.6 and Figure SD 3.6).

**Differences by Gender.** Male high school seniors have consistently reported lower levels of peer disapproval of drinking than have their female peers. In 1999, 64 percent of males reported peer disapproval of drinking, compared with 79 percent of females. Male students also report somewhat lower peer disapproval of smoking cigarettes and marijuana.

**Differences by Race.**<sup>60</sup> For 1999, rates of disapproval for drug use were generally similar for Black and White 12th graders for marijuana and for cocaine use. Group differences are apparent for disapproval of smoking (81 percent disapproval among Black compared with 69 percent among White students) and disapproval of drinking (79 percent disapproval among Black compared with 70 percent among White students).

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<sup>59</sup> Substance Abuse and Mental Health Services Administration. 1996. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Rockville, MD: Public Health Service.

<sup>60</sup> Estimates for Blacks and Whites include Hispanics of those races. Persons of Hispanic origin may be of any race.

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**Table SD 3.6**

**Percentage of 12th-grade students in the United States who report that peers would not approve of their using alcohol, marijuana, cocaine, or cigarettes: Selected years, 1980-2000**

|  | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Disapprove of taking one to two drinks nearly every day</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total  | 71   | 75   | 79   | 77   | 78   | 77   | 76   | 73   | 73   | 72   | 72   | 72   | 72   |
| Gender   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Male   | 61   | 69   | 71   | 68   | 69   | 68   | 67   | 65   | 63   | 63   | 63   | 64   | —    |
| Female   | 79   | 81   | 87   | 85   | 85   | 85   | 83   | 80   | 83   | 79   | 82   | 79   | —    |
| Race <sup>b</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| White  | 70   | 75   | 77   | 77   | 77   | 76   | 76   | 72   | 71   | 71   | 71   | 70   | —    |
| Black  | 76   | 82   | 85   | 80   | 81   | 80   | 78   | 74   | 77   | 74   | 75   | 79   | —    |
| <b>Disapprove of smoking marijuana even occasionally</b>             |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total  | 51   | 64   | 76   | 76   | 79   | 74   | 69   | 65   | 63   | 60   | 60   | 62   | 64   |
| Gender   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Male   | 49   | 64   | 73   | 73   | 78   | 72   | 63   | 62   | 59   | 57   | 56   | 58   | —    |
| Female   | 52   | 65   | 80   | 78   | 80   | 75   | 74   | 69   | 67   | 63   | 66   | 65   | —    |
| Race <sup>b</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| White  | 50   | 63   | 74   | 75   | 78   | 73   | 68   | 64   | 62   | 58   | 60   | 61   | —    |
| Black  | 59   | 72   | 89   | 86   | 84   | 76   | 70   | 69   | 66   | 67   | 67   | 63   | —    |
| <b>Disapprove of taking cocaine even occasionally<sup>a</sup></b>    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total  | —    | —    | 94   | 95   | 94   | 94   | 94   | 94   | 93   | 91   | 92   | 92   | 93   |
| Gender   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Male   | —    | —    | 92   | 93   | 93   | 92   | 91   | 92   | 90   | 89   | 90   | 90   | —    |
| Female   | —    | —    | 96   | 96   | 96   | 96   | 96   | 95   | 96   | 93   | 95   | 94   | —    |
| Race <sup>b</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| White  | —    | —    | 95   | 96   | 96   | 95   | 94   | 95   | 93   | 91   | 92   | 93   | —    |
| Black  | —    | —    | 92   | 97   | 91   | 89   | 94   | 92   | 93   | 95   | 94   | 91   | —    |
| <b>Disapprove of smoking one or more packs of cigarettes per day</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total  | 74   | 74   | 75   | 74   | 76   | 72   | 72   | 69   | 69   | 69   | 69   | 71   | 73   |
| Gender   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Male   | 73   | 72   | 73   | 72   | 76   | 68   | 67   | 65   | 65   | 65   | 66   | 67   | —    |
| Female   | 76   | 76   | 77   | 77   | 77   | 75   | 77   | 74   | 73   | 71   | 73   | 76   | —    |
| Race <sup>b</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| White  | 75   | 73   | 73   | 72   | 75   | 71   | 69   | 67   | 66   | 64   | 65   | 69   | —    |
| Black  | 74   | 81   | 87   | 88   | 82   | 80   | 83   | 81   | 82   | 83   | 81   | 81   | —    |

<sup>a</sup> The question regarding cocaine use was not included prior to 1986.

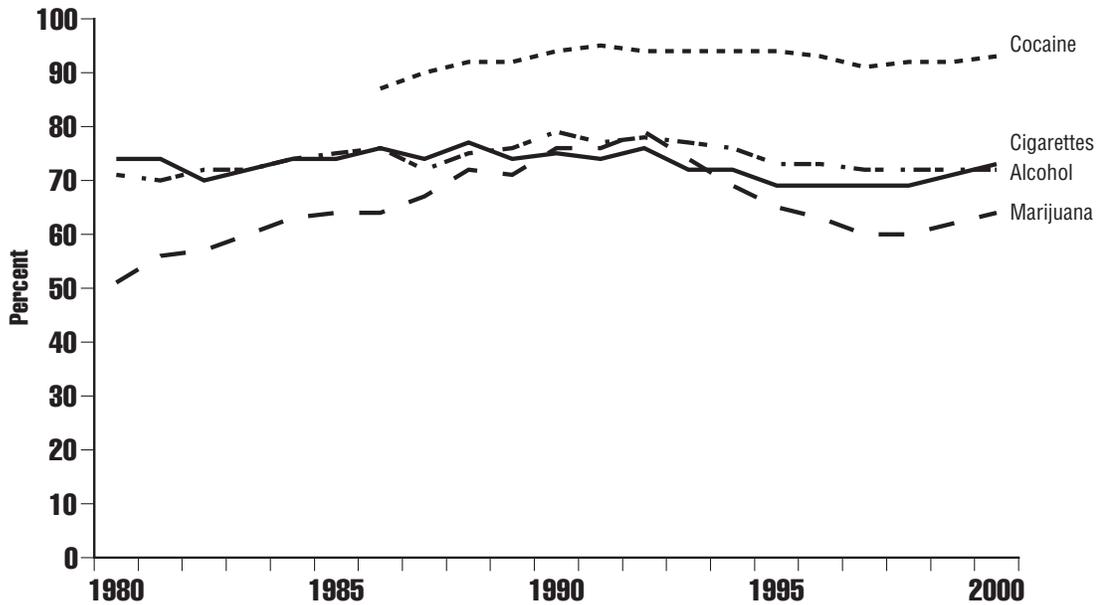
<sup>b</sup> Estimates for Blacks and Whites include Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Johnston, O'Malley, and Bachman, 2001. *Monitoring the Future, National Survey Results on Drug Use 1975–2000: Volume II, College Students and Young Adults*. University of Michigan, Institute for Social Research, U.S. Department of Health and Human Services; Bethesda, MD. (Table 9-1).

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**Figure SD 3.6**

Percentage of 12th-grade students in the United States who report that peers would not approve of their using alcohol, marijuana, cocaine, or cigarettes: 1980-2000



Note: Figure reports students' perceived peer nonapproval rates of use of various drugs: alcohol (taking one to two drinks nearly every day), marijuana (smoking even occasionally), cocaine (using even occasionally), and smoking (one or more packs of cigarettes every day).

Sources: Johnston, O'Malley, and Bachman, 2001. *Monitoring the Future, National Survey Results on Drug Use, 1975-2000: Volume II, College Students and Young Adults*.



### **SD 3.7 Abuse of Alcohol or Other Controlled Substances**

The use of alcohol and other illicit drugs by teens has been related to numerous social problems, such as delinquency, fighting, and early sexual activity<sup>61</sup> and to a variety of short- and long-term health problems.<sup>62</sup> For many reasons, then, it is important that youth stay free of all such substances.

In 1998, 13 percent of 12- through 17-year-olds reported binge drinking and/or any use of an illicit drug during the previous month (see Table SD 3.7).

**Differences by Gender.** Rates of reported use vary little by gender. In 1998, 14 percent of males and 12 percent of females ages 12 through 17 reported illicit drug use or binge drinking in the previous month.

**Differences by Race and Hispanic Origin.**<sup>63</sup> Rates of reported use differed little among Hispanics, non-Hispanic Blacks, and non-Hispanic Whites, ranging from 12 percent to 14 percent in 1998.

**Table SD 3.7**

**Percentage of youth ages 12 through 17 in the United States reporting illicit drug<sup>a</sup> use and/or binge drinking<sup>b</sup> in the past month, by gender and by race and Hispanic origin: 1994-1998**

|   | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|------|------|------|------|------|
| <b>Total</b>                                | 13   | 15   | 13   | 14   | 13   |
| <b>Gender</b>                               |      |      |      |      |      |
| Male  | 14   | 17   | 14   | 16   | 14   |
| Female                                      | 12   | 13   | 11   | 13   | 12   |
| <b>Race and Hispanic origin<sup>c</sup></b> |      |      |      |      |      |
| White, non-Hispanic                         | 15   | 16   | 13   | 15   | 14   |
| Black, non-Hispanic                         | 10   | 12   | 10   | 12   | 11   |
| Hispanic                                    | 10   | 13   | 13   | 13   | 12   |

<sup>a</sup> Illicit drugs include marijuana, cocaine (including crack), heroin, hallucinogens (including PCP), inhalants, and nonmedical use of psychotherapeutics.

<sup>b</sup> Binge drinking includes drinking five or more drinks on the same occasion on one or more days in the past 30 days.

<sup>c</sup> Persons of Hispanic origin may be of any race.

Source: Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies, Prevalence Branch. Unpublished analyses, National Household Survey on Drug Abuse, 1994-1998.

<sup>61</sup> National Institute on Drug Abuse. *National Trends in Drug Use and Related Factors among American High School Students and Young Adults, 1976-1986*. 1987. DHHS Pub. No. (ADM) 87-1535. Washington, DC: U.S. Department of Health and Human Services. See also: Grant, B.R., and Dawson, D.A. Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse*, 9:103-110, which reports decreasing odds of alcohol dependence with each increasing year of age at onset of use, as well as decreasing odds of alcohol abuse.

<sup>62</sup> Public Health Service, 1993.

<sup>63</sup> Persons of Hispanic origin may be of any race.

